

Department of Energy

Washington, DC 20585

MAR 2 2004

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW, Suite 700 Washington, DC 20004-2901

Dear Mr. Chairman:

This letter transmits the Programmatic Risk Assessment for the Savannah River Site (SRS) Salt Processing Program (Commitment 2.12 of the Department of Energy's Implementation Plan in response to Recommendation 2001-1), provides information on the Low Curie Salt (LCS) Program (Commitment 2.11), and gives notice that Commitment 2.9 (Process the first batch of LCS in Saltstone) was not met as scheduled.

In accordance with Commitment 2.12, please find enclosed the Programmatic Risk Assessment for the SRS Salt Processing Program (Enclosure 1). The assessment covers the risks and proposed mitigation actions for the key facilities and activities required to execute all three phases of the SRS Salt Processing Program: LCS processing, low curie-high actinide processing, and high curie-high actinide processing. The Department plans to maintain this assessment and update it as needed. It will be used as a management tool to ensure that risks are identified, managed, and mitigated to support our Accelerated Cleanup Program goals.

One of the identified risks in the Programmatic Risk Assessment is how ongoing litigation may delay certain aspects of the Salt Processing Program. On July 3, 2003, parts of DOE Order 435.1 dealing with the authority for determining waste incidental to reprocessing were declared invalid by the U.S. District Court for the District of Idaho. This ruling currently is on appeal to the U.S. Court of Appeals for the Ninth Circuit. Accordingly, the Programmatic Risk Assessment did not undertake a probability or consequence analysis of the litigation's outcome on the Salt Processing Program and rated this risk as "Uncertain." Once this litigation is resolved, the Department will provide you with an update on salt waste processing and disposal plans.

An evaluation of the LCS Program as outlined in Commitment 2.11 has found that while the LCS Program plans and schedules have not been fully achieved, several key technical milestones have been met. The most significant of these are:

- The draining of higher curie interstitial liquid from high level waste saltcake in Tank 41 and dissolution of a portion of the remaining saltcake.
- Modification of the Saltstone facility to process salt solutions with a cesium activity of 0.1 curies per gallon in anticipation of LCS feed.

• Restoration of Building 512-S and the cold chemical demonstration of filter performance. Plant activities remain ahead of schedule to demonstrate actinide removal process viability by the June 2004 commitment date.

Several issues have prevented the LCS Program from meeting all of its objectives.

- Technical problems were encountered with returning Tank 50 to service due to the
 discovery of excessive solids and tetraphenylborate on the bottom of the tank. As
 highlighted in the July 14, 2003, letter, these issues have been resolved; however,
 resolution delayed program progress.
- The Saltstone Facility permit modifications required for processing LCS feed, and
 disposal of the resulting grouted waste, were submitted to the State of South Carolina in
 September 2002. The South Carolina Department of Health and Environmental Control
 notified the Department that it would take no official action on the permit applications
 pending resolution of the ongoing litigation concerning waste incidental to reprocessing.
 Without this permit, the current plan to process LCS at Saltstone (Commitment 2.9)
 cannot proceed.
- While permit issues may prevent waste processing at this time, the Department and its contractors continue working to demonstrate the technical feasibility of the LCS processing option. Samples of the dissolved Tank 41 saltcake have been taken and the analytical results have been provided to your staff. These sample results show higher than anticipated activity levels and may result in the need for additional actions to achieve the total volume to be disposed of as LCS.

Should you or your staff have any questions concerning these issues, please contact Jeffrey Allison at (803) 952-6337 or me at (202) 586-0738.

Sincerely,

Dr. Inés Triay

Deputy Chief Operating Officer
Office of Environmental Management

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Enclosure

cc w/o encl: Jessie Hill Roberson, EM-1 Mark Whitaker, DR-1 Jeffrey Allison, SR